

CLAIMS:

We claim:

- 1 1. A method of requesting location-based services comprising the steps of:
2 responsive to receiving a network request for location-based processing from a
3 pervasive device, storing said received network request and forwarding said received
4 network request to a selected location-based application;
5 receiving a rejection response to said forwarded network request and identifying
6 in said rejection response a request for required location information; and,
7 locating said required location information from within said stored network
8 request, formulating an augmented network request with said required location
9 information, and forwarding said augmented network request to said selected location-
10 based application, said selected location-based application performing said location-
11 based processing using said required location information provided in said augmented
12 network response.
- 1 2. The method of claim 1, wherein said network requests are hypertext transfer
2 protocol (HTTP) requests and said rejection response is a class 4xx HTTP rejection
3 response.
- 1 3. The method of claim 1, further comprising the steps of:
2 caching said augmented network requests in a cache.

1 4. The method of claim 3, wherein said steps of storing and forwarding said
2 received network request comprises the steps of:
3 determining whether a valid augmented network request associated with said
4 received network request can be located within said cache; and,
5 if said valid augmented network request can be located within said cache,
6 forwarding said valid augmented network request to said selected location based
7 application; and,
8 if a valid augmented network request cannot be located within said cache,
9 storing said received network request and forwarding said received network request to
10 said selected location-based application.

1 5. The method of claim 4, further comprising the steps of:
2 recognizing a pattern of received network requests which result in a particular
3 rejection response;
4 associating a particular formulated augmented network request with said
5 recognized pattern; and,
6 storing said particular formulated augmented network request in said cache
7 according to said association.

8 6. The method of claim 4, further comprising the steps of:
9 recognizing a pattern of received network requests which result in a rejection
10 response for which said required location information cannot be provided to said
11 selected location based application as requested in said rejection response;

12 associating a particular formulated augmented network request with said
13 recognized pattern, said particular formulated augmented network request indicating
14 that said required location information cannot be provided to said selected location
15 based application; and,
16 storing said particular formulated augmented network request in said cache
17 according to said association.

1 7. A machine readable storage having stored thereon a computer program for
2 requesting location-based services, the computer program comprising a routine set of
3 instructions for causing the machine to perform the steps of:
4 responsive to receiving a network request for location-based processing from a
5 pervasive device, storing said received network request and forwarding said received
6 network request to a selected location-based application;
7 receiving a rejection response to said forwarded network request and identifying
8 in said rejection response a request for required location information; and,
9 locating said required location information from within said stored network
10 request, formulating an augmented network request with said required location
11 information, and forwarding said augmented network request to said selected location-
12 based application, said selected location-based application performing said location-
13 based processing using said required location information provided in said augmented
14 network response.

1 8. The machine readable storage of claim 7, wherein said network requests are
2 hypertext transfer protocol (HTTP) requests and said rejection response is a class 4xx
3 HTTP rejection response.

1 9. The machine readable storage of claim 7, further comprising the steps of:
2 caching said augmented network requests in a cache.

1 10. The machine readable storage of claim 9, wherein said steps of storing and
2 forwarding said received network request comprises the steps of:
3 determining whether a valid augmented network request associated with said
4 received network request can be located within said cache; and,
5 if said valid augmented network request can be located within said cache,
6 forwarding said valid augmented network request to said selected location based
7 application; and,
8 if a valid augmented network request cannot be located within said cache,
9 storing said received network request and forwarding said received network request to
10 said selected location-based application.

1 11. The machine readable storage of claim 10, further comprising the steps of:
2 recognizing a pattern of received network requests which result in a particular
3 rejection response;
4 associating a particular formulated augmented network request with said
5 recognized pattern; and,

6 storing said particular formulated augmented network request in said cache
7 according to said association.

1 12. The machine readable storage of claim 10, further comprising the steps of:
2 recognizing a pattern of received network requests which result in a rejection
3 response for which said required location information cannot be provided to said
4 selected location based application as requested in said rejection response;
5 associating a particular formulated augmented network request with said
6 recognized pattern, said particular formulated augmented network request indicating
7 that said required location information cannot be provided to said selected location
8 based application; and,
9 storing said particular formulated augmented network request in said cache
10 according to said association.